

High Density Metal Oxide Fillers in Rubber Compounds

Abstract

The use of high density metal oxide fillers in vulcanizable rubber compounds is disclosed. The use of the fillers reduce or eliminate the need for conventional fillers, such as carbon black or silica, because viscoelastic performance properties of vulcanized rubber compounds with high density metal oxide fillers therein predict improved wet traction and rolling resistance, two key factors in the use of rubber compounds as vehicle tire treads. Methods of making and using such rubber compounds are also disclosed.